

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,749	06/27/2003	Tsuyoshi Iijima	239135US0	5354
22850	7590 01/12/2005		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			MARTIN, ANGELA J	
ALEXANDI	RIA, VA 22314		ART UNIT PAPER NUMBER	
			1745	
			DATE MAILED: 01/12/2004	ς.

Please find below and/or attached an Office communication concerning this application or proceeding.

			W
	Application No.	Applicant(s)	
	10/606,749	IIJIMA ET AL.	
Office Action Summary	Examiner	Art Unit	
TI MAII INO DATE CHI	Angela J. Martin	1745	
The MAILING DATE of this communication app Period for Reply	ears on the cover sneet with the c	orrespondence addre	SS
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed rs will be considered timely. the mailing date of this commo	; unication.
Status			
 1) Responsive to communication(s) filed on 27 Ju 2a) This action is FINAL. 2b) This 3) Since this application is in condition for alloware closed in accordance with the practice under E 	action is non-final.		erits is
Disposition of Claims			
 4) ☐ Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or 			
Application Papers			
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original than the correction of the correction of the original than the correction of the correcti	epted or b) objected to by the lidrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1	
Priority under 35 U.S.C. § 119			
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Sta	ge
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/04; 1/04.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate	2)

Application/Control Number: 10/606,749

Art Unit: 1745

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 2, 4, 5, 7, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsumura et al., U.S. Pat. No. 6,416,559 B1.

Rejection of claims 1, 2, 4, 5, 7, and 8 drawn to a lithium secondary battery.

Matsumura et al., teach a lithium secondary battery wherein a plurality of cathodes and anodes are arranged to construct an electrode structure (Fig. 5), which includes an outermost layer of electrode on which a back coat layer is formed (col. 4, lines 48-55). It teaches the back coat layer prevents the electrodes from short-circuiting (col. 5, lines 64-67 and col. 6, lines 1-7). It also teaches the layer contains at least an inorganic material as a resin (col. 5, lines 64-67 and col. 6, line 1). It teaches the filler is the same material as an electrode active material (col. 7, lines 3-5). It teaches the layer has a thickness of 200 um (on both sides)(col. 7, lines 50-57). It also teaches the electrode structure is a laminate structure (col. 6, lines 42-57).

Thus, the claims are anticipated.

Application/Control Number: 10/606,749

Art Unit: 1745

3. Claims 3 and 6 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Matsumura et al., U.S. Pat. No. 6,416,559 B1.

Rejection of claims 3 and 6 drawn to a lithium secondary battery.

Matsumura et al., teach a lithium secondary battery as described above. It teaches the material and thickness of the layer within the above claimed range and would therefore prevent the electrodes from warping. It also teaches the separator is comprises polyolefin, which would have a piercing strength of at least 50 gf.

Thus, the claims are anticipated.

However, if the claims are not anticipated, in the alternative the claims are obvious because one of ordinary skill in the art would manufacture an electrode, which would not warp and, would provide a separator with a sufficient piercing strength to further prevent short-circuiting.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/606,749 Page 4

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ASM